

Claim Listing

- 1.(original) A color calibration method, comprising:
 - rendering a color image;
 - in response to a user selecting an adjustment to a first color in the image, making a perceptually uniform adjustment to the first color in the image; and
 - rendering an adjusted color image reflecting the adjustment made to the first color in the image.

- 2.(original) The method of Claim 1, further comprising:
 - in response to a user selecting an adjustment to a second color in the adjusted image, making a perceptually uniform adjustment to the second color in the adjusted image; and
 - rendering a second adjusted color image reflecting the adjustment made to the second color in the adjusted image.

- 3.(original) The method of Claim 1, wherein rendering a color image comprises printing the color image and rendering an adjusted color image comprises printing the adjusted color image.

- 4.(original) The method of Claim 2, wherein the second color is the same as the first color.

- 5.(original) A color calibration method, comprising:
 - rendering a color image;
 - displaying a palette of memory colors appearing in the image;
 - displaying a menu of memory color adjustments;
 - in response to a user selecting an adjustment to a first memory color in the image, making a perceptually uniform adjustment to the first memory color in the image; and
 - rendering an adjusted color image reflecting the adjustment made to the first memory color in the image.

6.(original) The method of Claim 5, further comprising:

in response to a user selecting an adjustment to a second memory color in the adjusted image, making a perceptually uniform adjustment to the second memory color in the adjusted image; and

rendering a second adjusted color image reflecting the adjustment made to the second memory color in the adjusted image.

7.(original) The method of Claim 5, wherein rendering a color image comprises printing the color image and rendering an adjusted color image comprises printing the adjusted color image.

8.(original) The method of Claim 6, wherein the second memory color is the same as the first memory color.

9.(original) A color calibration method, comprising:

rendering a color image;

prompting a user to select a first memory color appearing in the image;

prompting the user to select an adjustment to the selected first memory color;

in response to a user selecting an adjustment to the selected first memory color, making a perceptually uniform adjustment to the selected first memory color; and

rendering an adjusted color image reflecting the adjustment made to the selected first memory color.

10.(original) The method of Claim 9, further comprising:

prompting the user to select a second memory color appearing in the adjusted image;

prompting the user to select an adjustment to the selected second memory color;

in response to the user selecting an adjustment to the selected second memory color, making a perceptually uniform adjustment to the selected second memory color; and

rendering a second adjusted color image reflecting the adjustment made to the selected second memory color.

11.(original) The method of Claim 10, wherein the selected second memory color is the same as the selected first memory color.

12.(original) A color calibration method, comprising:
printing a color image;
displaying a palette of memory colors appearing in the image;
displaying a menu of memory color adjustments;
in response to a user selecting an adjustment to a memory color in the image, making a perceptually uniform adjustment to the selected memory color; and
printing an adjusted color image reflecting the adjustment made to the selected memory color.

13.(original) A color calibration method, comprising:
printing a color image;
prompting a user to select a memory color appearing in the image;
prompting the user to select an adjustment to the selected memory color;
in response to the user selecting a memory color, identifying the selected memory color in a perceptually uniform color modeling space;
in response to the user selecting an adjustment to the selected memory color, adjusting the identified memory color in the perceptually uniform color modeling space;
transforming the adjusted memory color in the perceptually uniform color modeling space to a color in a printer color modeling space; and
printing an adjusted color image reflecting the adjustment made to the selected memory color.

14.(original) The method of Claim 13, further comprising prompting the user to select the color image and wherein printing a color image comprises printing the selected color image.

15.(original) A color calibration method, comprising:
storing a color image in an RGB color modeling space;
printing the color image;
prompting a user to select a memory color appearing in the image;

prompting the user to select an adjustment to the selected memory color;
in response to the user selecting a memory color, transforming an RGB model
color value representing the selected memory color to a CIELab model color value;
in response to the user selecting an adjustment to the memory color, adjusting
the CIELab model color value;
transforming the adjusted CIELab model color value to a CMYK model color
value; and
printing an adjusted color image based on the CMYK model color value.

16.(original) The method of Claim 15, further comprising, after transforming the
CIELab model color value to a CMYK model color value, smoothing a discontinuity in an
LUT of CMYK color values associated with the transformation of the adjusted CIELab
model color value to the CMYK model color value.

17.(original) A computer readable medium having instructions thereon for:
rendering a color image;
in response to a user selecting an adjustment to a first color in the image, making
a perceptually uniform adjustment to the first color in the image; and
rendering an adjusted color image reflecting the adjustment made to the first
color in the image.

18.(original) The medium of Claim 17, further comprising instructions for:
in response to a user selecting an adjustment to a second color in the adjusted
image, making a perceptually uniform adjustment to the second color in the adjusted
image; and
rendering a second adjusted color image reflecting the adjustment made to the
second color in the adjusted image.

19.(original) The medium of Claim 17, wherein the instructions for rendering a
color image comprise instructions for printing the color image and rendering an adjusted
color image comprises printing the adjusted color image.

20.(original) The medium of Claim 18, wherein the second color is the same as the first color.

21.(original) A computer readable medium having instructions thereon for:
rendering a color image;
displaying a palette of memory colors appearing in the image;
displaying a menu of memory color adjustments;
in response to a user selecting an adjustment to a first memory color in the image, making a perceptually uniform adjustment to the first memory color in the image;
and
rendering an adjusted color image reflecting the adjustment made to the first memory color in the image.

22.(original) The medium of Claim 21, further comprising instructions for:
in response to a user selecting an adjustment to a second memory color in the adjusted image, making a perceptually uniform adjustment to the second memory color in the adjusted image; and
rendering a second adjusted color image reflecting the adjustment made to the second memory color in the adjusted image.

23.(original) The medium of Claim 21, wherein the instructions for rendering a color image comprise instructions for printing the color image and rendering an adjusted color image comprises printing the adjusted color image.

24.(original) The medium of Claim 22, wherein the second color is the same as the first color.

25.(original) A computer readable medium having instructions thereon for:
rendering a color image;
prompting a user to select a first memory color appearing in the image;
prompting the user to select an adjustment to the selected first memory color;
in response to a user selecting an adjustment to the selected first memory color, making a perceptually uniform adjustment to the selected first memory color; and

rendering an adjusted color image reflecting the adjustment made to the selected first memory color.

26.(original) The medium of Claim 25, further comprising instructions for:
prompting the user to select a second memory color appearing in the adjusted image;

prompting the user to select an adjustment to the selected second memory color;
in response to the user selecting an adjustment to the selected second memory color, making a perceptually uniform adjustment to the selected second memory color;
and

rendering a second adjusted color image reflecting the adjustment made to the selected second memory color.

27.(original) The medium of Claim 26, wherein the second color is the same as the first color.

28.(original) A computer readable medium having instructions thereon for:
printing a color image;
displaying a palette of memory colors appearing in the image;
displaying a menu of memory color adjustments;
in response to a user selecting an adjustment to a memory color in the image,
making a perceptually uniform adjustment to the selected memory color; and
printing an adjusted color image reflecting the adjustment made to the selected memory color.

29.(original) A computer readable medium having instructions thereon for:
printing a color image;
prompting a user to select a memory color appearing in the image;
prompting the user to select an adjustment to the selected memory color;
in response to the user selecting a memory color, identifying the selected memory color in a perceptually uniform color modeling space;
in response to the user selecting an adjustment to the selected memory color,
adjusting the identified memory color in the perceptually uniform color modeling space;

transforming the adjusted memory color in the perceptually uniform color modeling space to a color in a printer color modeling space; and
printing an adjusted color image reflecting the adjustment made to the selected memory color.

30.(original) The medium of Claim 29, further comprising instructions for prompting the user to select the color image and wherein printing a color image comprises printing the selected color image.

31.(original) A computer readable medium having instructions thereon for:
storing a color image in an RGB color modeling space;
printing the color image;
prompting a user to select a memory color appearing in the image;
prompting the user to select an adjustment to the selected memory color;
in response to the user selecting a memory color, transforming an RGB model color value representing the selected memory color to a CIELab model color value;
in response to the user selecting an adjustment to the memory color, adjusting the CIELab model color value;
transforming the adjusted CIELab model color value to a CMYK model color value; and
printing an adjusted color image based on the CMYK model color value.

32.(original) The medium of Claim 31, further comprising instructions for, after transforming the CIELab model color value to a CMYK model color value, smoothing a discontinuity in an LUT of CMYK color values associated with the transformation of the adjusted CIELab model color value to the CMYK model color value.

33.(original) A computer readable medium storing:
a color image;
a palette of memory colors appearing in the image;
controls for adjusting a color on the palette; and
programming for making perceptually uniform adjustments to the color image corresponding to the adjustment controls.

34.(original) The medium of Claim 33 storing programming for:
rendering the color image;
in response to a user selecting a color adjustment from the controls for adjusting
a color, making a perceptually uniform adjustment to the color image corresponding to
the color adjustment; and
rendering an adjusted color image.

35.(original) A printer, comprising:
a print engine;
a user interface; and
a controller operatively coupled to the print engine and the user interface, the
controller having a processor and a memory storing a color image, a palette of memory
colors appearing in the image, controls for adjusting a color on the palette, and
programming for making perceptually uniform adjustments to the color image
corresponding to the adjustment controls.

36.(previously presented) The printer of Claim 35, wherein the controller
memory stores programming for:
printing the color image;
in response to a user selecting a color adjustment from the controls for adjusting
a color, making a perceptually uniform adjustment to the color image corresponding to
the color adjustment; and
printing an adjusted color image.

37.(original) The printer of Claim 36, wherein the controller memory stores
programming for displaying the palette of memory colors on the user interface and
displaying the controls for adjusting a color on the user interface.

38.(original) A printing system, comprising:
a computer having a processor and a memory storing a color image, a palette of
memory colors appearing in the image and controls for adjusting a color on the palette;
and

a printer operatively coupled to the computer, the printer comprising a print engine and a controller operatively coupled to the print engine, the controller having a processor and a memory storing programming for making perceptually uniform adjustments to the color image corresponding to the adjustment controls on the computer.

39.(original) A color calibration system, comprising:
a means for rendering a color image;
a means for, in response to a user selecting an adjustment to a color in the image, making a perceptually uniform adjustment to the color in the image; and
a means for rendering an adjusted color image reflecting the adjustment made to the color in the image.